An Eye Opening Approach to Facial Synkinesis in Veterans with Head Trauma and Bell’s Palsy

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I. Case Presentation #1
   a. Case History: Facial Synkinesis in a veteran with a history of head trauma
      i. Demographics
      ii. Chief complaint: “My right eye closes when eating”
         1. Started after ipsilateral facial/head trauma while on active duty in the 1990’s
      iii. History of Present Illness
      iv. Pertinent medical history/medications
   b. Clinical Findings
      i. Synkinetic ptosis OD– demonstrated with video
      ii. Lacrimation with salivation right side

II. Case Presentation #2
   a. Case History: Facial Synkinesis in a veteran with a history of multiple episodes of Bell’s Palsy
      i. Demographics
      ii. Chief complaint: "excessive right eye tearing when I eat"
         1. started within a few months after 2nd episode of Bell's Palsy in 1986
      iii. History of Present Illness
      iv. Pertinent medical history/medications
   b. Clinical Findings
      i. Synkinetic ptosis OD– demonstrated with video
      ii. Lacrimation with salivation right side
   c. Treatment and management
      1. Monitor

III. Discussion
   a. Definition of synkinesis
   b. History and mechanism of synkinesis
   c. Common ocular signs and symptoms of synkinesis
   d. Etiology of our case
      i. Cranial nerve review: anatomy, motor and sensory function, testing
         1. Cranial nerve III: oculomotor
         2. Cranial nerve V: trigeminal
         3. Cranial nerve VII: facial
      ii. Differential Diagnoses
         1. Primary: facial synkineses
2. Others: trigemino-oculomotor synkinesis, facial-oculomotor synkinesis, trigemino-facial synkinesis

e. Facial synkinesis
   i. Etiology
   ii. Inverse Marcus Gunn Phenomenon
   iii. Diagnostic tools
   iv. In-office facial synkinesis screening
  v. Treatment and management
     1. Options
        a. Synkinesis control techniques
        b. Botulinum toxin injections
     2. Case #1
        a. MRI of the brain and orbits, with and without contrast
        b. Oculoplastics referral for Botox injections
     3. Case #2
        a. Patient elected to monitor without treatment

IV. Conclusion
a. Optometrists should be aware of the possibility for synkinesis in patients with a history of cranial nerve paralyses or head trauma.
b. An MRI should be performed to rule out masses or lesions when etiology cannot be explained.
c. Botox injections provide for an excellent non-surgical solution for synkinesis involving the facial nerve.

V. References


